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IN THE

# Supreme Court of the United States

October Term, 1971
No. 71-1042

EXER-GENIE, INC., and E. E. HOLKESVICK,
*Petitioners,*

*vs.*

ALEXANDER G. McDONALD and BUDDY SYSTEMS, INC.,
*Respondents.*

**Petition for Writ of Certiorari to the United States Court of Appeals for the Ninth Circuit.**

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IN THE

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EXER-GENIE, INC., and E. E. HOLKESVICK,
*Petitioners,*

*vs.*

ALEXANDER G. MCDONALD and BUDDY SYSTEMS, INC.,
*Respondents.*

**Petition for Writ of Certiorari to the United States Court of Appeals for the Ninth Circuit.**

*To the Honorable Chief Justice and Associate Justices of the Supreme Court of the United States:*

Petitioners pray that a Writ of Certiorari issue to review the decision of the United States Court of Appeals for the Ninth Circuit, rendered by a divided Court in the above-entitled cause.

## I.
## OPINIONS BELOW.

The Findings of Fact and the Conclusions of Law of the District Court are reproduced in the Appendix at page 3* and the opinion of the Court of Appeals

*The pages in the Appendix are indicated by the letter "A", and the pages in the Clerk's record are indicated by the letter "C". All emphasis in quotations from legal authorities are Petitioners, unless otherwise stated.

(by a divided Court) upon which review is sought, is in the Appendix at page 21. The aforementioned opinion is reported at 171 USPQ 277; .... F.2d .... The unreported "Order" modifying the opinion of the Court of Appeals and denying the present Petitioners' petition for rehearing (by a divided Court) is reproduced in the Appendix at page 32.

## II.

## JURISDICTION.

The Opinion of the Court of Appeals sought to be reviewed is dated September 14, 1971, and was entered on September 14, 1971. The Order denying the petitions for rehearing is dated November 18, 1971, and was entered on November 18, 1971.

This Court has jurisdiction to review the Opinion of the Court of Appeals pursuant to 28 U.S.C. 1254 (1).

## III.

## QUESTIONS PRESENTED FOR REVIEW.

1. In *Graham v. John Deere, Co.*, 383 U.S. 1, 17, this Court referred to three "conditions" for patentability . . . novelty and utility as defined in §101 and §102 of Title 35, United States Code, and non-obviousness as set out in §103. Novelty and utility are consistently recognized to be questions of fact. Is non-obviousness, in like manner, a question of fact upon which a trial court's finding may be reversed only if "clearly erroneous" under Rule 52(a), F.R.C.P.? There is a conflict among the Circuits (and apparently among the present Justices) in this regard, all citing *Graham v. John Deere, Co.* in support of the opposite positions.

2. In *Graham v. John Deere, Co.*, 383 U.S. 1, 15, this Court stated that if the difference between the subject matter sought to be patented and the prior art is such that the "subject matter as a whole" would have been obvious, then the subject matter cannot be patented. If "obviousness" is determined to be a question of law under Question 1 above, is it improper for a Circuit Court to consider the significance of *each* structural difference (as differentiated from the subject matter as a whole) and make a finding that one such difference has little or no significance, which finding is directly opposite to a fact which was *agreed upon by the parties* in the pre-trial order and which was found by the District Court, viz. that the patentee had made a "radical change from the prior constructions"? Or, stated somewhat differently, if obviousness of the subject matter as a whole is a question of law, is the significance of each structural difference a question of law or of fact?

3. May a Circuit Court disregard Rule 52(a) as to findings of fact regarding the prior art and the statutory presumption of validity of a patent under 35 U.S.C. 282, as in the present situation wherein the District Court found as a *fact* that none of the additional prior art patents listed and/or relied upon by the defendants is any more pertinent than the reference patents cited by the Patent Office examiners, and the Circuit Court (on a 2:1 basis) disregarded that finding and made a contrary finding that the presumption is insufficient in the face of pertinent prior art not before the patent examiners?

4. Has the majority of the Circuit Court in this cause utilized the "new use of an old device" doctrine in a manner which is in conflict with applicable de-

cisions of this Court, by utilizing said doctrine to invalidate a patent where the same majority of the Circuit Court further concluded that "three changes are required to *adapt* the . . . *fire-escape* devices to conform to the description in plaintiff's *exerciser* patent"?

## IV.

## CONSTITUTIONAL PROVISIONS AND STATUTES INVOLVED.

This cause involves Article I, Section 8 of the Constitution (A. 32); Sections 101, 103 and 282 of the Patent Act of 1952, 35 U.S.C. 101, 103 and 282 (A. 33); and Rule 52(a) of the Federal Rules of Civil Procedure (A. 33-34).

## V.

## CONCISE STATEMENT OF THE CASE.

Petitioners instituted the present action against Respondents in the District Court for infringement of claims 8, 9, and 10 of United States Letters Patent No. 3,197,204, and for false patent marking under 35 U.S.C. 292. The District Court had jurisdiction of both claims for relief under 28 U.S.C. 1338(a).

Petitioners filed a motion for a preliminary injunction, and, on May 28, 1968, the District Court found that the exerciser of Petitioner's patent had widespread sale and use, that the patent was presumed to be valid due to public acquiescence over a four-year period, and that there was a strong probability that the accused exerciser infringed the patent [C. 176-179]. The District Court entered an Order on May 28, 1968, that upon the giving of security by Petitioners, the Respondents shall be enjoined and restrained until the final determination of the action from directly or in-

directly infringing patent No. 3,197,204 [C. 180]. The designated security was posted by Petitioners.

The case was tried before the District Court without a jury, for a period of four days.

During the trial, the Court witnessed numerous demonstrations, and heard the testimony of two technical experts, a trainer for a professional football team; a coach of Olympic swimmers, a former coach and Associate Professor of Physical Education at a California State college, and a former athletic trainer and present Professor of Physical Education at the University of Southern California.

The parties agreed in the Pre-Trial Order and the Court found that prior to the invention of the exercising device of patent No. 3,197,204, all of the known exercising devices utilizing movement, employed the same types of weights, elastic members or springs for providing the resistance to be overcome in exercising the muscles of the users' body [A. 5, C. 230].

The Court further found that although persons skilled in the exerciser art and in the field of physical education were aware of the disadvantages of the known exerciser devices utilizing movement and of the advantages of an isometric-isotonic type of exercise in which there is an isometric "hold" followed by an isotonic movement, and sought to develop and/or locate an exerciser device suitable for performing the isometric-isotonic type of exercise, none was developed or located prior to the exerciser of the patent in suit [A. 5, C. 230].

The parties agreed and the Court found that while testing a commercial fire-escape device which he had developed, the Petitioner Holkesvick recognized that it

tired the muscles in his arms to pull the rope through the fire-escape device in order to return the device to a starting position at the top of the rope, prior to beginning another descent [A. 6, C. 231].

*The parties agreed* and the Court found that thereafter, the Petitioner Holkesvick conceived and developed several *new* and *different* friction-type exerciser devices which would resist the movement of a rope therethrough and which could be mounted on a support such as a peg or a doorknob so that the rope could be pulled back and forth through the device, first in one direction and then in the other direction [A. 6, C. 231].

The parties agreed and the Court found that in the first friction-type exerciser devices, the rope entered adjacent one end of the shaft portion and exited adjacent the other end thereof and each of the devices pivoted about the support as the direction of the movement of the rope therethrough was reversed [A. 7, C. 231-232].

*The parties agreed* and the Court found that thereafter the Petitioner Holkesvick *made a radical change from the prior constructions*, and produced the first friction type exerciser in which the rope entered and exited from the same end of the device, thereby permitting the exerciser to be supported at one end and in such a manner that it was not necessary for it to be pivoted about the support when the direction of movement of the rope through it was changed [A. 7, C. 232].

The parties agreed and the Court found that the exerciser device of patent No. 3,197,204 achieved a high degree of commercial success, that it was used by the astronauts in their physical training program at NASA

in Houston, Texas, and by numerous professional and amateur football, baseball, and basketball teams. For many teams, its use was mandatory and to the exclusion of all other exerciser devices [A. 9, C. 233-234].

The Court found that the most pertinent prior art references cited by the Patent Office Examiners, included two twine-tensioning devices and a lowering device used in mountain climbing. Also, although the Respondents listed many patents as prior art, at the trial of the action they referred to only seven [A. 14, C. 238].

The Court found that none of the additional prior art patents listed and/or relied upon by the Respondents was any more pertinent than the reference patents cited by the Patent Office Examiners, the Court pointing out that the twine-tensioning devices operated on the friction-resistance principle and in which the twine was pulled through the device, with the twine being wrapped around a shaft and guided onto and off the shaft through passageways adjacent the ends thereof. The Court pointed out that the fire-escape patents relied upon by the Respondents did not add anything to the aforementioned twine-tensioning devices, from either a structural or an operational standpoint [A. 14, C. 238-239].

The Court then found that the exerciser of patent No. 3,197,204 is a completely new concept in the field of exerciser devices. The principle of frictional resistance of a rope around a shaft is very old and well known, and the use of this principle with fire-escape devices goes back at least to 1874, based upon the prior art listed by the Respondents . . . some 85 years prior to the invention of the exerciser device of the patent in suit. Yet, no one made the transition to an exer-

ciser from a friction-type fire-escape device nor from any other device employing the friction-resistance principle, even though persons in the exerciser art and in the physical education field are highly skilled, and the disadvantages of the existing exerciser devices were known to such persons in the exerciser and physical education fields [A. 15, C. 239].

The Court concluded that patent No. 3,197,204 is valid and that claims 8, 9 and 10 thereof were infringed by Respondents [A. 1, C. 225].

On appeal, the Court of Appeals for the Ninth Circuit (by a divided Court) concluded that patent No. 3,197,204 is invalid as constituting the mere application of an old device to a new use. Although the majority of the Circuit Court concluded that the exerciser device is old, they further stated that *three* changes are required to *adapt* the Leffelman and the DeBoucherville fire-escape devices to conform to the description in Petitioner's exerciser patent (A. 27).

The majority of the Circuit Court referred to the three changes as follows. First, the holes or "passageways" must be moved from the outer edge of the end piece or "hubs" toward the center to a point next to the shaft, and flared inwardly [outwardly] to reduce friction, and permit easier and smoother passage of the rope. Second, the rope must be doubled back so that both ends emerge from the same end of the device, rather than running through the device from one end to the other. And finally, the rope must be pulled through the device, rather than the device moving along the rope, as it is when used as a fire escape (A. 27).

Although the majority of the Circuit Court did not set aside any of the findings of fact by the District Court as being clearly erroneous, or even refer to them,

they stated that the first two changes are minor, that the significance of the second change, *i.e.*, causing the rope to be doubled back so that both ends emerge from the same end of the device, rather than running through the device from one end to the other . . . is particularly questionable (A. 28).

Again, without setting aside any of the findings of fact of the District Court as being clearly erroneous, or even referring to them, the majority of the Circuit Court stated that the presumption of validity of the patent was insufficient in the face of pertinent art (the fire-escape patents) not before the Patent Examiners (A. 28).

The majority of the Circuit Court was not persuaded by the secondary indicia of invention, including commercial success, long-felt but unfulfilled need, and copying, on the basis that patentable invention was clearly lacking (A. 28).

Circuit Judge Ely dissented, impliedly relying on Rule 52(a) F.R.C.P. and pointing out that the trial was very carefully conducted, that the record reflects an abundance of evidence to support the factual findings which constituted the foundation for the legal conclusions, that the proper resolution of the critical factual issues was difficult, and therefore he would affirm the judgment because he could not say with positive assurance that the District Court's factual findings were clearly erroneous (A. 31).

Both parties petitioned for rehearing. The petitions for rehearing were denied, but Circuit Judge Ely would grant Petitioners' petition for rehearing. However, the first paragraph of the Opinion of the Circuit Court was modified to hold that only claims 8, 9, and 10 are invalid, the original Opinion having stated that the patent is invalid (A. 32).

## VI.

## ARGUMENT.

### 1. Although Certiorari Is Discretionary, It Has Been Consistently Granted to Resolve a Conflict Among the Circuits Regarding a Question Which Is of Vital Importance to Patent Litigation.

The Supreme Court has long recognized the desirability of granting certiorari to resolve a conflict among the Circuits regarding a question which is important in patent litigation. *Fourco Glass Co. v. Transmira Products Corp.*, 353 U.S. 222 (1957); *Sanford v. Kepner*, 344 U.S. 13 (1952).

As will be discussed hereinafter, *the* most important and unresolved issue in patent law, is the question of whether "obviousness" under 35 U.S.C. 103 is a question of law or a question of fact upon which a trial court's finding shall be reversed only if it is clearly erroneous (Rule 52(a) F.R.C.P.)

This issue is present in practically every patent infringement action, and affects the scope of the testimony of witnesses, the issues which can be submitted to a jury and the instructions to the jury, and whether the Circuit Courts can ignore the findings of fact without holding that they are clearly erroneous.

### 2. The Decision of This Court in Graham v. John Deere Co. Is Unclear and a Substantial Conflict Exists Among the Circuits (and Possibly Among the Present Justices) Whether "Obviousness" Under 35 U.S.C. 103 Is a Question of Fact or of Law.

Chief Justice Burger, when sitting as a Circuit Judge in the District of Columbia Circuit, stated it was a factual conclusion. Thus, *Commissioner of Patents v.*

*Deutsche Gold-Und-Silber-S.*, etc., 397 F.2d 656, 660, contains the following comment:

> "In the *Graham* case the Supreme Court, for the first time, devoted itself to an extensive discussion of the concept of 'non-obviousness' as codified in section 103. Some further clarification seems in order in what appears to be a blurred area of patent law."

In footnote 12, it is stated, *inter alia:*

> ". . . It is now clear that the Court of Customs and Patent Appeals would not apply a 'clearly erroneous' rule because they are of the view that the determination of 'obviousness' is a legal, not a factual conclusion. . . . We remain of our view, . . . that this is a factual conclusion based on a legal standard; thus the clearly erroneous rule applies."

Associate Justice Blackmun, when sitting as a Circuit Judge in the Eighth Circuit, apparently concluded that obviousness is a question of law. Thus, in *L & A Products, Inc. v. Britt Tech. Corporation*, 365 F.2d 83, 86 (1966), the Circuit Court reversed the District Court "on the issue of patentability and patentability's requirement of nonobviousness." The Circuit Court referred to *Graham v. John Deere Co.* regarding the requirements of §103, considered the teachings of the prior art, and concluded:

> "We need go no further into the prior art to be convinced that the mechanical patent in suit does not fulfill the legal requirement of nonobviousness at the level of ordinary skill in the field."

Subsequent to the decision of this Court in *Graham v. John Deere Co.*, certiorari has been unsuccessfully

sought in cases on both sides of the issue as to whether "obviousness" is a question of law or of fact.

Thus, in *Eimco Corporation v. Peterson Filters and Engineering Co.*, 406 F.2d 431, 435 (10 Cir. 1968), cert. denied 395 U.S. 963, the Circuit Court held that obviousness as referred to in Section 103 is a question of fact for the trial court, which determination should not be set aside in the absence of clear error, stating:

> "The trial court's complete and careful findings disclose that for the purpose of ascertaining whether the Peterson device would be obvious to a person having ordinary skill in the art, it measured the device with the prior art together with the record as a whole. As indicated in the Graham case, obviousness 'to a person having ordinary skill in the art' is an illusive factual subject to be determined by the trial court. In recognizing the difficulties of Section 103 problems, the court warned that 'what is obvious is not a question upon which there is likely to be uniformity of thought in every factual context. The difficulties, however, are comparable to those encountered daily by the courts in such frames of reference as negligence and scienter, and should be amenable to a case-by-case development.' The difficulties referred to are questions of fact to be determined in the trial court. The courts agree that the ultimate question of validity is one of law. Griswold v. Oil Capital Valve Co., supra. *but obviousness as referred to in Section 103 is a question of fact for the trial court, which determination should not be set aside in the absence of clear error.*"

On the other side of the coin, so to speak, in *Swofford v. B & W., Inc.*, 395 F.2d 362, 368 (5 Cir. 1968), cert. denied 393 U.S. 935, rehearing denied 393 U.S. 1060, the Circuit Court held that obviousness is a question of law, stating:

> "Our conclusion that the ultimate issue under section 103 is one of law carries our approval of the district court's having withdrawn the issue from the jury and having independently decided it. We need not repeat here the facts as found in the court below; nor do we feel it necessary to summarize the court's application of the legal standard of nonobviousness to those facts. The district judge withheld his Memorandum and Order until after *Graham* was decided and reviewed his holding in its light. We find that his opinion correctly applies the law set out in *Graham*."

Returning to an over-all view of the split between the Circuits on the question of whether "obviousness" is a question of law or of fact, set forth below are a few of the cases in addition to those referred to hereinabove, which have considered the issue and which have reached opposite conclusions.

**(a) Circuits in Which Obviousness Is a Question of Fact.**

In addition to the District of Columbia Circuit and the Tenth Circuit referred to above, the First Circuit considered the obviousness issue in *Koppers Company v. Foster Grant Co.*, 396 F.2d 370, 372 (1968), and the Court affirmed the decision of the District Court that the patent in suit was invalid on the ground of obviousness, stating:

> "Nevertheless, to grant a patent to the first person who finds the exact combination when exper-

imenting within a known field could give too much force to the patent laws. In this situation, although within limits, a question of law, *the determination whether a discovery of a new combination is or is not obvious must be a question of fact.* The plaintiff has failed to persuade us that the district court employed a wrong rule, or exceeded proper limits."

In the Fourth Circuit, in *Mahaffy and Harder Engineering v. Standard Packaging Corporation*, 389 F.2d 525, 530 (1968), the Court referred to *Graham v. John Deere* and stated:

> "Since statutory obviousness is a question of fact, Noe v. Smith, 300 F.2d 430 (5 Cir. 1962), Willis v. Town, 182 F.2d 892, 894 (8 Cir. 1950), we could reverse the District Judge's finding here only if we were convinced that it was clearly erroneous. F. R. Civ. P. 52(a)."

**(b) Circuits in Which Obviousness Is a Question of Law.**

In the Second Circuit, in *Shaw v. E. B. & A. C. Whiting Company*, 417 F.2d 1097, 1102 (1969), cert. denied 397 U.S. 1076, rehearing denied 398 U.S. 954, the Court referred to the issue of obviousness, as follows:

> "The important issue in this appeal, then, is whether 'the differences between the subject matter [of the Shaw invention] * * *' and the prior art is such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains * * * 35 U.S.C. § 103. The ultimate question of obviousness is one of law to be determined after several factual inquires have been made."

The Fifth Circuit's apparent viewpoint regarding obviousness is set forth in *Swofford v. B & W, Inc.*, referred to above.

In the Sixth Circuit, in *Kaiser Industries Corporation v. McLouth Steel Corp.*, 400 F.2d 36 (1968), the Court referred to the continuing confusion regarding "invention", by stating in footnote 4, as follows:

> 4. "In Graham v. John Deere Co., 383 U.S. 1, 10-12, 86 S.Ct. 684 (1966), the United States Supreme Court noted the confusion that resulted from the early development of the term 'invention' as a word of legal art. Although *Graham* went far towards clearing up the confusion, certain areas still remain perplexing."

The Court then went on to hold that obviousness is a question of law, stating, l.c. 41:

> "The nature of McLouth's defense compels the Court to attempt to distinguish inventive experimentation from mere development of know-how in an art with which the Court has no familiarity. The ultimate distinction is one of law because it amounts to a determination of obviousness or non-obviousness. Great A & P Tea Co. v. Supermarket Equip. Corp., 340 U.S. 147, 71 S.Ct. 127, 95 L.Ed. 162 (1950)."

In the Seventh Circuit, prior to *Graham v. John Deere Co.*, the Court sat en banc to resolve the standards to be applied in determining the validity of a patent within the scope of appellate review. Thus, in *Armour & Co. v. Wilson & Co.*, 274 F.2d 143, 156 (1960), the Court considered *Graver Tank & Mfg. Co. Inc. v. Linde Air Products Co.*, 336 U.S. 271, wherein

this Court held that patentable invention is a question of law, and to *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147, and concluded as follows:

> "The final step involves the resolution of the meaning of Section 103 of the Patent Act to determine, from the language of the statute, whether 'the differences between the subject sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.' This requires the application of the correct legal criteria to the factual determination made by the trial court. This calls for the exercise of a legal judgment and as such is subject to review by an appellate tribunal as a question of law."

However, as in others of the Circuits, consistency regarding whether obviousness is a question of fact or law just does not exist in the Seventh Circuit. Thus, in *Reece v. Elkhart Welding & Boiler Works, Inc.*, 171 USPQ 129 ... F.2d ... (7th Cir. 1971), the Court affirmed the finding of patent validity and infringement, stating:

> "Judge Kerner of this court has set forth a detailed analysis of the criteria applicable to the determination of the matter of obviousness in Deep Welding, Inc. v. Sciaky Bros., Inc., 417 F.2d 1227, 1232-33, 163 USPQ 144, 148-149 (7th Cir. 1969). See also, Graham v. Deere, 383 U.S.1, 148 USPQ 459 (1966).

> "We do not find erroneous the district court's finding that the combination of functionally cooperating parts to which the claims in suit are directed would not have been obvious at the time the invention was made to a person having ordinary skill in the art."

Query, did the Circuit Court mean that obviousness is a question of fact which is subject to the clearly erroneous limitation of Rule 52(a)?

The position of the Eighth Circuit is referred to above.

In the Ninth Circuit, the various panels have been fairly consistent in holding that "obviousness" is a question of law. Thus, by way of example, in *Hensley Equipment Company v. Esco Corporation*, 375 F.2d 432, 436 (1967), the rule was stated as follows:

> "The obviousness or nonobviousness of the subject matter of a patent presents a question of law. National Lead Company v. Western Lead Products Company, 9 Cir., 291 F.2d 447, 450-451. However, that legal question is to be determined against a factual background, with particular emphasis on three considerations, namely: the scope and content of the prior art, the differences between the prior art and the claims at issue, and the level of ordinary skill in the pertinent art. See Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 17-18, 86 S.Ct. 684, 15 L.Ed. 2d 545."

However, the recent case of *Northrop Architectural Systems v. Lupton Mfg. Co.*, 437 F.2d 889, 891 (1971), appears to cast some doubt on whether there

is such consistency, even in the Ninth Circuit, because the Circuit Court set aside the summary judgment of invalidity on the basis of obviousness, stating:

> "The opinion of the appellant's experts, if believed, would require a finding that the subject matter of the disputed claims, considered as a whole, would not have been obvious at the time of the invention to a person having an ordinary skill in the sliding door construction art. At a minimum, there is sufficient evidence in the affidavits presented by the expert witnesses for the appellant to cast serious doubt on the 'obviousness' of appellant's patent claims. Much of the evidence presented by the appellees, however, tends to point in the opposite direction. *Thus, there exists an issue of material fact.* The issue of infringement raised in the Lupton appeal is in the same posture.
>
> "That an expert's opinion on the highly technical issues of *obviousness* and infringement is of significant value to *the trier of the facts* is the law of this circuit. Continental Connector Corp. v. Houston Fearless Corp., 350 F.2d 183 (9th Cir. 1965). A determination of which expert is the more credible will not be disturbed on appeal for it is not the function of the appellate court to reevaluate conflicting expert testimony. Continental Connector Corp. v. Houston Fearless Corp. *supra* p. 190; Carborundum Co. v. Wilbanks, Inc. 420 F.2d 43, 49 (9th Cir. 1969). The rule of evidence that an expert may express an opinion on a subject even though the opinion embraces an ultimate issue to be decided by the trier of the facts, has long been recognized."

Based upon the above conflicting decisions, it is believed clear that it is necessary for this Court to state whether "obviousness" is a question of law or of fact, in order to put an end to the confusion which has existed since *Graham v. John Deere Co.*

### 3. Reason and Past Experience Dictate That "Obviousness" Under 35 U.S.C. 103 Must Be a Question of Fact, Subject to the "Clearly Erroneous" Limitation of Rule 52(a) F.R.C.P.

Why should the determination of "nonobviousness" for patent validity, be any different from "equivalency" for patent infringement? Equivalency and infringement have always been questions of fact, but the Courts have vacillated on how to handle "nonobviousness".

Stated somewhat differently, what difference is there between determining whether an accused device is sufficiently "close" to the claim language of the patent to be an equivalent for a finding of infringement, as compared with determining whether the claims are sufficiently "close" to the prior art devices to be "obviousness" for a finding of patent invalidity?

Perhaps not surprisingly, the guide lines set forth in *Graham v. John Deere Co.*, 383 U.S. 1, for determining "obviousness" are substantially the same as the guide lines set down in *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 609, for determining "equivalency".

Thus, the guide lines in *Graham* are as follows:

> "While the ultimate question of patent validity is one of law, Great A. & P. Tea Co. v. Supermarket Equipment Corp., supra, 340 U.S. at 155, 71 S.Ct. at 131, the §103 condition, which is but

one of three conditions, each of which must be satisfied, lends itself to several basic factual inquiries. Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined."

In *Graver*, the guide lines are stated as follows:

"What constitutes equivalency must be determined against the context of the patent, the prior art, and the particular circumstances of the case. Equivalence, in the patent law, is not the prisoner of a formula and is not an absolute to be considered in a vacuum. It does not require complete identity for every purpose and in every respect. In determining equivalents, things equal to the same thing may not be equal to each other and, by the same token, things for most purposes different may sometimes be equivalents. Consideration must be given to the purpose for which an ingredient is used in a patent, the qualities it has when combined with the other ingredients, and the function which it is intended to perform. *An important factor is whether persons reasonably skilled in the art would have known of the interchangeability of an ingredient not contained in the patent with one that was.*

"*A finding of equivalence is a determination of fact.* Proof can be made in any form: through testimony of experts or others versed in the technology; by documents including texts and treatises; and, of course, by the disclosures of the prior

art. Like any other issue of fact, final determination requires a balancing of credibility, persuasiveness and weight of evidence. It is to be decided by the trial court and that court's decision, under general principles of appellate review, should not be disturbed unless clearly erroneous. Particularly is this so in a field where so much depends upon familiarity with specific scientific problems and principles not usually contained in the general storehouse of knowledge and experience."

It will be noted that about the only difference between the two sets of guide lines, is that *Graham* refers to the level of ordinary skill in the pertinent art, whereas *Graver* refers to persons reasonably skilled in the art, but this difference is dictated by the specific wording of 35 U.S.C. 103.

Also, the above statement in *Graver* regarding the manner of establishing equivalency, *e.g.*, through the testimony of experts or others versed in the technology, is equally applicable to a determination of "obviousness".

Because of the highly technical nature of patent litigation, the trial court is in the best possible position to judge the credibility of the expert witnesses and to view and appreciate the significance of the numerous demonstrations which are utilized in most patent actions.

As pointed out hereinabove, there is considerable confusion and differences among the Circuits regarding the questions of whether "obviousness" is an issue of law or fact, and in those Circuits where it is considered to be a question of law, the confusion is compounded regarding the testimony of witnesses, and the

instructions to and the wording of special verdicts submitted to a jury.

"Thus, if the question of "obviousness" is the sole province of the District Court, no witness . . . lay or expert . . . should testify as to whether the differences between the prior art and the subject matter of the patent would have been obvious to him or to a person having ordinary skill in the art, at the time the alleged invention was made.

How then, does the District Court decide the issue? Does he subjectively determine whether the differences or changes would have been obvious to *him*, or does he rely upon the so-called secondary considerations which include commercial success, long-felt but unsolved needs, failure of others, etc.?

Conversely, as to the issues of "equivalency" and infringement, the trier of the facts has the benefit of the testimony of experts or others versed in the technology, and therefore it is more likely there will be an accurate determination of what would have been known to a person reasonably skilled in the art.

The use of such expert testimony is provided for by Rules 702 and 704 of the "Rules of Evidence for the United States Courts and Magistrates", which state as follows:

> "Rule 702. If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise."

"Rule 704. Testimony in the form of an opinion or inference otherwise admissible is not objectionable because it embraces an ultimate issue to be decided by the trier of fact."

It is submitted that the only realistic basis for obtaining some uniformity in the decisions throughout the various Circuits and for obtaining a reasonably accurate determination of what would be obvious to a person having ordinary skill in the art, is to consider "obviousness" a question of fact and to permit lay and expert witnesses to testify regarding this issue. The Circuit Courts could prevent obvious error by the "clearly erroneous" limitation of Rule 52(a), and the District Courts could prevent error where the determination of "obviousness" is by special verdicts and interrogatories submitted to a jury, by means of judgment *n.o.v.* under Rule 50, F.R.C.P.

**4. Assuming "Obviousness" Is a Question of Law, Uniformity in the Determination Thereof Cannot Be Achieved if Circuit Courts Are Permitted to Make Their Own Determination as to the Significance of Specific Differences Between the Prior Art and the Patented Structure, Contrary to the Facts Agreed Upon by the Parties or Determined by the District Court and Contrary to the "Subject Matter as a Whole" Approach Dictated by 35 U.S.C. 103.**

If it were determined by this Court that "obviousness" is a question of law, there will continue to be chaos and confusion, so long as the Circuit Courts are permitted to ignore the facts agreed upon by the parties or found by the District Court, and to make their own determination as to the significance of each spe-

cific difference between the prior art devices and the patented device . . . instead of considering the obviousness of the subject matter as a whole, as required by 35 U.S.C. 103.

This is manifest in the present case where the majority of the Circuit Court stated that "The first two changes are minor" and that "the significance of the second change is particularly questionable." The so-called second change required the rope to be doubled back through the device so that both ends thereof emerged from the same end of the device, rather than running through the device from one end to the other.

The majority of the Circuit Court clearly did not understand the significance of this difference nor what would have been obvious to a person having ordinary skill in the art, because *the parties agreed in the Pre-Trial Order* (the defendants having at least ordinary skill in the art) that the doubling back of the rope constituted "a radical change from the prior constructions, and produced the first friction-type exerciser in which the rope entered and exited from the same end of the device, thereby permitting the exerciser to be supported at one end and in such a manner that it was not necessary for it to be pivoted about the support when the direction of movement of the rope through it was changed." [A. 7, C. 232].

Furthermore, in the Ninth Circuit this problem is compounded by the fact that whether the patentee is subjected to a review of individual differences or the

subject matter of a whole, depends upon the particular panel which considers the matter.

As pointed out hereinabove, in the present case the majority of the Circuit Court determined anew the significance of the individual differences, whereas, in *Reeves Instrument Corp. v. Beckman Instruments, Inc.*, 444 F.2d 263 (9 Cir. 1971), decided by a different panel some five months prior to the present case, the Circuit Court specifically pointed out that the test was between the prior art and the subject matter sought to be patented as a whole, stating: l.c. 270-271:

> "This argument fails on two grounds. First, it misconstrues the import of the *A & P* decision. Second, it suggests an analytical approach to patentability which is directly contrary to the statutory language of 35 U.S.C. §103 which provides that the inquiry into patentability must be drawn toward the 'subject matter as a whole' and not to the elements of a claimed combination and their individual novelty.
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> "Moreover, the Court in *Black Rock* reaffirmed the position it had previously taken in Graham v. John Deere Co., 383 U.S. 1, 86 S.Ct. 684, 15 L.Ed.2d 545 (1966) to make clear that the crucial question in determining obviousness is whether the differences between the subject matter sought to be patented, as a whole, and the prior art are obvious to a man of ordinary skill in the art."

**5. The Statutory Presumption of Validity of a Patent Under 35 U.S.C. 282 Will Remain a Nullity and the Validity of Patents Will Continue to Be Determined by the Subjective Feelings of Circuit Judges, so Long as They Continue to Ignore This Court's Directives in Graham v. John Deere Co. and the Findings of Fact by District Courts Regarding the Teachings of the Prior Art.**

In *Graham v. John Deere Co.*, 383 U.S. 1, this Court stated that the §103 condition lends itself to several basic factual inquiries, one of which is the scope and content of the prior art. Obviously, this should be subject to the clearly erroneous limitation of Rule 52(a) of the Federal Rules of Civil Procedure.

Also, Section 282 of Title 35, United States Code, provides that a patent shall be presumed valid.

Nevertheless, many Circuit Judges reexamine the prior art . . . without benefit of any meaningful explanations . . . and reach their own conclusions regarding the significance thereof, and with complete difference to the findings of fact by the District Court which sat through many days of trial and witnessed demonstrations and listened to the testimony of numerous witnesses.

The present case is a typical example of such an occurrence. Thus, in Findings of Fact 34, 35, and 36 [A. 13, C. 238-239] the District Court referred to the most pertinent prior art references cited by the Patent Office examiners, referred to the many patents listed by the defendants as prior art and the fact that at the trial they referred to only seven, and stated why none of the additional prior art patents listed and/or relied upon by the defendants is any more pertinent

than the reference patents cited by the Patent Office examiners, from either the standpoint of construction or operation.

The majority of the Circuit Court did not set aside these Findings of Fact as being clearly erroneous, nor even refer to them, but instead, brushed aside the presumption of validity with the brief statement that the presumption is insufficient in the face of pertinent prior art not before the Patent Examiners. Such a statement of purported new and different fact also *raises the question of the basis upon which the Circuit Judges determined that the so-called additional pertinent prior art was not before the Patent Examiners*, because none of the Examiners testified and there is no way of knowing whether the Examiners considered this additional art and discarded it as being less pertinent than the patents they cited.

**6. The Majority of the Circuit Court in This Cause Used the "New Use of an Old Device" Doctrine in a Manner Which Conflicts With the Decisions of This Court.**

The majority of the Circuit Court stated that the device involved here is old, and referred to such statements as "It is well settled that mere application of an old device to a new use does not constitute invention" as a basis for invalidating the patent, but then went on to state that *three* changes are required to *adapt* the fire-escape devices to conform to the description in plaintiff's exerciser patent (A. 27).

In *C. & A. Potts & Co. v. Creager*, 155 U.S. 597 (1895), this Court pointed out that it often requires as much inventive genius to grasp the idea that a device used in one art may be made available in another, as

it would be necessary to create the device *de novo*, stating the general rule regarding the new use of an old device, as follows:

> ". . . If the new use be analogous to the former one, the court will undoubtedly be disposed to construe the patent more strictly, and to require clearer proof of the exercise of the inventive faculty in adapting it to the new use, particularly if the device be one of minor importance in its new field of usefulness. On the other hand, if the transfer be to a branch of industry but remotely allied to the other, and the effect of such transfer has been to supersede other methods of doing the same work, the court will look with a less critical eye upon the means employed in making the transfer. Doubtless, a patentee is entitled to every use of which his invention is susceptible, whether such use be known or unknown to him; but the person who has taken his device, and, by improvements thereon, has adapted it to a different industry, may also draw to himself the quality of inventor.
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> * * *
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> "Indeed, it often requires as acute a perception of the relations between cause and effect, and as much of the peculiar intuitive genius which is a characteristic of great inventors, to grasp the idea that a device used in one art may be made available in another, as would be necessary to create the device de novo. And this is not the less true if, after the thing has been done, it appears to the ordinary mind so simple as to excite wonder that it was not thought of before. The apparent simplicity of a new device often leads an inex-

perienced person to think that it would have occurred to any one familiar with the subject; but the decisive answer is that, with dozens and perhaps hundreds of others laboring in the same field, it had never occurred to any one before. The practiced eye of an ordinary mechanic may be safely trusted to see what ought to be apparent to every one."

In the present case, it is obvious that the Petitioners' exerciser device is different from the old fire-escape devices because the Circuit Court referred to three changes which would be required to convert one to the other.

Secondly, it is abundantly clear that the exerciser art is completely different from the fire-escape art.

And thirdly, *the parties agreed* and the District Court found as a fact that the reversal of the rope through the exerciser device was a radical change from the prior constructions.

It is recognized that Circuit Courts must be permitted to determine whether the applicable law was properly applied to the established facts, but in the present cause the majority of the Circuit Court ignored the controlling facts agreed to by the parties and found by the District Court, and misapplied the established law regarding the "new use of an old device" doctrine, such that the decision of the Circuit Court should be reversed with a statement by this Court of the present law regarding the "adaptation" of a device from one art to another.

**Conclusion.**

It is respectfully requested that this Petition be granted in order that this Court might clear up the confusion among the Circuits and state whether "obviousness" under 35 U.S.C. 103 is a question of law or one of fact which is subject to the clearly erroneous limitation of Rule 52(a), and to also advise the District Courts whether witnesses can testify as to their opinion regarding "obviousness" and whether juries can determine this issue.

Respectfully submitted,

CHARLES E. WILLS,
*Counsel for Petitioners.*

## APPENDIX.

### Judgment.

United States District Court, Central District of California.

Exer-Genie, Inc., and E. E. Holkesvick, Plaintiffs, vs. Alexander G. McDonald and Buddy Systems, Inc., Defendants. Civil Action No. 68-751-IH.

Filed: Aug. 15, 1969.

This cause having been heard by the Hon. Irving Hill, and the Court having considered the pleadings, the testimony of the witnesses for the respective parties in open court, and the exhibits received in evidence, and being fully advised and having made its Findings of Fact and Conclusions of Law.

IT IS ORDERED, ADJUDGED AND DECREED that:

1.

United States patent No. 3,197,204 is valid.

2.

Claims 8, 9 and 10 of patent No. 3,197,204 have been infringed by the defendants, and each of them.

3.

The defendants Alexander G. McDonald and Buddy Systems, Inc., and each of them, their officers, directors, agents, servants, and employees, and all persons in active concert or participation with them or any of them who receive actual notice of the injunction by personal service or otherwise, are permanently enjoined and restrained from directly or indirectly infringing, and from inducing others to infringe United States patent No. 3,197,204, and specifically but without limitation from making and having made, from using, and

from selling and having sold, an exerciser as exemplified by Plaintiffs' Exhibit 57.

4.

The Clerk shall return to the plaintiffs, the security which they gave for the issuance of the preliminary injunction.

5.

The plaintiffs shall have and recover of the defendants Alexander G. McDonald and Buddy Systems, Inc., their taxable costs and disbursements in the sum of $1191.89, and have execution therefor.

Dated: August 15, 1969.

/s/ IRVING HILL

United States District Judge

**Findings of Fact and Conclusions of Law.**

United States District Court, Central District of California.

Exer-Genie, Inc., and E. E. Holkesvick, Plaintiffs, vs. Alexander G. McDonald and Buddy Systems, Inc., Defendants. Civil Action No. 68-751-IH.

Filed: Aug. 15, 1969.

This cause having come on for trial before the Hon. Irving Hill, all parties having been represented by counsel who were present throughout the trial and oral and documentary evidence having been introduced in behalf of the respective parties, the evidence having been closed and the cause having been argued and submitted to the Court for its consideration and decision, and the Court having duly considered the same, finds the facts to be and states the conclusions of law as follows:

FINDINGS OF FACT

1.

This is an action for infringement of claims 8, 9 and 10 of United States Letters Patent No. 3,197,204, and false patent marking under 35 U.S.C. 292. Plaintiffs waived damages for any patent infringement. Defendants stated their defenses to be invalidity of patent No. 3,197,204, non-infringement of claims 8, 9 and 10, and fraud upon the Patent Office. Plaintiffs were granted a preliminary injunction, enjoining and restraining the defendants and all persons in active concert or participation therewith from directly or indirectly infringing patent No. 3,197,204 during the pendency of this action.

At all of the times mentioned, the plaintiff E. E. Holkesvick was and now is a citizen of the United States residing within the Central Judicial District of California. At all of the times mentioned, the plaintiff Exer-Genie, Inc. was and now is a corporation organized and existing under the laws of the State of California, with its principal place of business in the Central Judicial District of California.

3.

The defendant Alexander G. McDonald was and now is a citizen of Canada and at the time of the filing of the action herein, resided within the Central Judicial District of California. At all of the times mentioned, the defendant Buddy Systems, Inc. was and now is a corporation organized and existing under the laws of the State of California, with its principal place of business in the Central Judicial District of California.

4.

Only counts one and four of the Complaint remained before the Court for trial. The first count arises under the Patent Laws of the United States, Title 35, United States Code; jurisdiction is conferred by 38 U.S.C. 1338(a); and venue is proper under 28 U.S.C. 1400 (b) because all of the defendants resided within the Central Judicial District of California at the time of the filing of the action.

The fourth count arises under the Patent Laws of the United States, Title 35, United States Code; jurisdiction is conferred by 38 U.S.C. 1338(a); and venue is proper under 28 U.S.C. 1391(b) because all of the defendants resided within the Central Judicial Dis-

trict of California at the time of the filing of the action.

5.

Prior to the invention of the exercising device shown and described in patent No. 3,197,204, in the patent in suit, all of the known exercising devices utilizing movement, employed the same types of weights, elastic members or springs for providing the resistance to be overcome in exercising the muscles of the user's body. Such prior exercising devices had numerous known disadvantages, including the facts that many were relatively expensive and cumbersome, the user's muscles could be exercised only by repetitive and time-consuming duplications of the same exercise until the muscles became tired, the user could not terminate the exercise without being required to restrain the weight or spring while it returned to the starting position or to permit it to fall or spring back to that position, and the amount of resistance varied during the range of the movement.

6.

Although persons skilled in the exerciser art and in the field of physical education were aware of the disadvantages of the known exerciser devices utilizing movement and of the advantages of an isometric-isotonic type of exercise in which there is an isometric "hold" followed by an isotonic movement, and sought to develop and/or locate an exerciser device suitable for performing the isometric-isotonic type of exercise, none was developed or located prior to the exerciser of the patent in suit.

7.

In about the middle of 1960, John Hudnall brought to the attention of L. H. Himmelrich and the plaintiff

E. E. Holkesvick at Western Fire Protection, Inc., a crude fire escape device which device operated on a friction-resistance principle and included an elongated shaft with an enlarged portion at each end, a single circular hole in each enlarged portion spaced away from the shaft for receiving a length of rope which could be wrapped around the shaft, and an "eye" bolt protruding from one end for fastening the device to the belt of the user. The plan was to fasten one end of a long rope to the roof of a building so that the user could fasten the device to his belt and thereby descend the rope with the fire escape device freely sliding along the rope and restrained by the frictional engagement of the rope with the shaft.

8.

While testing a commercial fire escape device which he had developed and which operated on the same general principle as the one above described, the plaintiff Holkesvick recognized that it tired the muscles in his arms to pull the rope through the fire escape device in order to return the device to a starting position at the top of the rope, prior to beginning another descent.

9.

Thereafter, in about October 1960, the plaintiff Holkesvick conceived and developed several new and different friction-type exerciser devices which would resist the movement of a rope therethrough and which could be mounted on a support such as a peg or a doorknob so that the rope could be pulled back and forth through the device, first in one direction and then in the other direction.

10.

The early exerciser devices developed by Mr. Holkesvick are illustrated in Figs. 6-14 of patent No. 3,197,204, and are represented by Defendants' Exhibits LLL, MMM, NNN, OOO and PPP. In these first friction-type exerciser devices, the rope entered adjacent one end of the shaft portion and exited adjacent the other end thereof and each of the devices pivoted about the support as the direction of the movement of the rope therethrough was reversed.

11.

In the latter part of December 1960 or early part of January 1961, Mr. Holkesvick made a radical change from the prior constructions, and produced the first friction-type exerciser in which the rope entered and exited from the same end of the device, thereby permitting the exerciser to be supported at one end and in such a manner that it was not necessary for it to be pivoted about the support when the direction of movement of the rope through it was changed. This construction is represented by Defendants' Exhibit QQQ. It is similar to the construction illustrated in Fig. 2 of patent No. 3,197,204, except that the bottom hub-like portion was formed integral with the shaft and the sleeve was movable in the upward direction relative to the shaft to expose the passageways in the bottom hub-like portion. By sliding the sleeve along the shaft and exposing the passageways, the number of turns of rope on the shaft could be varied in increments of a one-half turn.

12.

In about February 1961, Mr. Holkesvick conceived and produced the friction-type exerciser shown in Figs.

1 through 5 of patent No. 3,197,204, in which the sleeve and the bottom hub-like portion containing the passageways for the entering and exiting of the rope, are rotatable relative to the shaft in very small increments as determined by the distance between the holes around the upper end of the sleeve, thereby providing for a relatively small change in the frictional resistance with each increment of relative rotation. This device is represented by Defendants' Exhibit RRR.

13.

On June 12, 1961, patent application Serial No. 116,393 was filed in the United States Patent Office, which application matured into patent No. 3,197,204, Plaintiffs' Exhibit 1, which issued on July 27, 1965, to the plaintiff E. E. Holkesvick.

14.

From July 27, 1965, to date, the plaintiff Holkesvick has been and now is the sole and exclusive owner of all right, title, and interest in and to patent No. 3,197,204.

15.

The exerciser of patent No. 3,197,204 achieved several unexpected results, viz. there is a substantially constant resistance throughout the range of movement of the rope as it is pulled through the device, and the movement of the rope can be stopped at any point and there is no force tending to return the rope to its starting position, as with elastic members or weight-type exercisers. Because of these two unexpected operating characteristics, the exerciser was ideally suited for performing the isometric-isotonic type of exercises.

16.

A further advantage of the exerciser of patent No. 3,197,204, is that it is relatively small in size and light

in weight. It can also be used in performing the same exercises which are performed on substantially all types of equipment contained in a conventional gym.

17.

The exerciser device of patent No. 3,197,204, which has been and is presently being sold under the trademark EXER-GENIE, has achieved a high degree of commercial success.

18.

It is being used by the astronauts in their physical training program at NASA in Houston, Texas and by many professional and amateur football, baseball, and basketball teams, and in many instances its use is mandatory and to the exclusion of all other exerciser devices.

19.

The defendant Alexander G. McDonald, first saw an EXER-GENIE exerciser of the patent in suit in September or October of 1966. Mr. McDonald became a distributor and sold approximately 300 EXER-GENIE exercisers during the first three-month period, but ran into financial problems and was unable to obtain the money necessary for purchasing additional exercisers for resale.

20.

During the time Mr. McDonald was promoting and selling the exerciser of patent No. 3,197,204, he became acquainted with William H. Miller, Dwaine C. Glass, David Moody and Henry Bicknell, all of whom later became officers and or stockholders of the defendant corporation, Buddy Systems, Inc.

21.

In early March 1967, at about the end of Mr. McDonald's association with the EXER-GENIE organization, Mr. McDonald met for lunch with Messrs. Miller, Glass, Moody and Bicknell. Mr. McDonald had an EXER-GENIE exerciser with him at the luncheon and it was taken apart and examined by members of the group. Mr. Bicknell noted the patent No. 3,197,204 on the end of the EXER-GENIE exerciser. Messrs. Glass, Miller, Moody, Bicknell and McDonald recognized and appreciated the commercial success of the patented EXER-GENIE exerciser and the demand which had been created for it by favorable publicity in newspapers and magazines, and they were interested in the possibility of manufacturing and selling a simplified exerciser.

22.

During a luncheon meeting with the group in the latter part of April 1967, Mr. Glass (who later became President of the defendant Buddy Systems, Inc.) suggested to them that they meet at his house that evening to see if they could design a simplified friction-type exerciser similar to the EXER-GENIE exerciser. Sketches were made on paper and at a blackboard, and through the combined efforts of those in attendance, a proposed design was decided upon.

23.

In the latter part of April, Messrs. Glass, Bicknell and Moody made a first prototype exerciser out of metal stock, Plaintiffs' Exhibit 41. Mr. McDonald used this first prototype in performing the same exercises which he performed with the patented EXER-GENIE exerciser, and reported that it operated in substantially the same manner as the EXER-GENIE exerciser.

24.

On or about May 1, 1967, Mr. McDonald visited the offices of Mr. Edward S. O'Brian, a patent attorney, to inquire of him regarding the question of the infringement of patent No. 3,197,204 by the first prototype, Plaintiffs' Exhibit 41. Mr. McDonald took with him the first prototype, a copy of patent No. 3,197,204, and a copy of the EXER-GENIE exerciser instruction manual.

25.

Based upon his reading of the patent and claims, Mr. O'Brian advised Mr. McDonald that in his opinion, there was less than a one-in-four chance of infringement because he did not think that the top portion of the prototype could properly be termed a "hub", but that there was an important qualification to this opinion, namely, that the prototype could be held to be an infringement under the "Doctrine of Equivalents".

26.

On or about May 6, 1967, Messrs. Glass, Bicknell and Moody made a second prototype exerciser from aluminum stock, Plaintiffs' Exhibit 45.

27.

On or about June 27, 1967, Messrs. Glass, Bicknell and Moody obtained from Custom Alloys, 20916 Currier Road, Walnut, California, a quotation (Plaintiffs' Exhibit 49) on the cost of making a shell core box or pattern for use in casting an exerciser as shown in the drawings, Plaintiffs' Exhibit 47, hereinafter referred to as the accused exerciser, and for the cost of producing 500 castings. Messrs. Glass, Bicknell and Moody authorized Custom Alloys to proceed with obtaining the shell core box and instructed the latter to

have the words "Buddy Systems Inc." cast in the body portion of the shaft, and the words "Pat." and "Pend." cast in the upper end of the shaft. The group had discussed the filing of a design patent application, and at this time did not realize that an application had not yet been filed.

28.

The group also proceeded with the formation of a California corporation with the name Buddy Systems, Inc. The articles of incorporation were signed on July 17, 1967, and on July 25, 1967, Buddy Systems, Inc. was incorporated under No. 530,416 (Plaintiffs' Exhibit 51). Twenty thousand shares of stock with a par value of $10.00 per share were to be authorized, and the first directors were Dwaine C. Glass, Henry Bicknell, Jerry Hornstein, David Moody, Alexander McDonald, George Fillerup and William Miller.

29.

On or about July 26, 1967, Buddy Systems, Inc. received the first runs of castings of the commercial version of the accused exerciser, Plaintiffs' Exhibit 57. In or about the first part of August 1967, Custom Alloys completed the delivery of approximately 500 castings of the accused exerciser, with the words "Buddy Systems Inc." cast in the body portion of the shaft and the words "Pat." and "Pend." cast in the upper end of the shaft.

30.

On or about August 7, 1967, Mr. McDonald delivered one of the first castings of the commercial accused exerciser to Mr. O'Brien for the preparation of drawings and the filing of a design patent application, and Mr. O'Brian docketed a design patent application with the notation that the first prior use, sale or applica-

tion of the devise was "probably about July 1967". Plaintiffs' Exhibit 53.

31.

Approximately 15-25 of the first castings were given away and/or used in testing to determine the best method for plating the surface of the exerciser. The remainder, approximately 475-485, were delivered to Camsco Foundry Inc. 419 South Motor Avenue, Azusa, California, to be "tumbled" prior to plating. These castings were ruined during the tumbling operation and were melted-down at a later date. Camsco Foundry, Inc. later replaced the ruined castings with new castings which were properly tumbled and then plated, after Defendants' design patent application was filed in the Patent Office.

32.

On or about September 18, 1967, Mr. O'Brian sent a design patent application to Mr. McDonald, to be signed by the latter and returned to him for filing. Mr. McDonald executed the application on or about September 22, 1967, and the application was filed in the Patent Office on October 31, 1967.

33.

The first shipments to purchasers of accused exercisers, packaged in boxes (Plaintiffs' Exhibits 57-62), were sold under the mark EXER-TONER by the defendant Buddy Systems, Inc., and shipped in the period February-April 1968.

34.

The most pertinent prior art references cited by the Patent Office examiners during the prosecution of the application which matured into patent No. 3,197,204,

are Sampson U.S. patent No. 500,778 (Plaintiffs Exhibit 79), Lauritsen U.S. patent No. 609,106 (Plaintiffs' Exhibit 80), and Allain French patent No. 995,304 (Plaintiffs' Exhibit 78).

35.

The defendants listed many patents as prior art, but at the trial of the action specifically referred to only seven, these being Leffleman patent No. 779,550 (Defendants' Exhibit T), De Boucherville patent No. 147,828 (Defendants' Exhibit K), Van Scoy patent No. 425,716 (Defendants' Exhibit GGG), Parker patent No. 785,019 (Defendants' Exhibit CCC), Brooke patent No. 308,052 (Defendants' Exhibit BBB), Gregory (Great Britain) patent No. 13,939 (Defendants' Exhibit ZZ), and Ross patent No. 434,888 (Defendants' Exhibit EEE).

36.

None of the additional prior art patents listed and/or relied upon by the defendants is any more pertinent than the reference patents cited by the Patent Office examiners. Reference patents Sampson No. 500,778 and Lauritsen No. 609,106 show twine-tensioning devices which operate on the friction-resistance principle and in which the twine is pulled through the device, with the twine being wrapped around a shaft and guided onto and off the shaft through passageways adjacent the ends thereof. In Sampson, the shaft is rotatable relative to the end support so as to provide means for varying the number of turns of twine on the shaft and the amount of frictional resistance. Additional patents Leffleman No. 779,550 and DeBoucherville No. 147,828 listed by the defendants do not add anything to Lauritsen and Sampson from either a struc-

tural or operational standpoint and are actually fire-escape devices which were designed to slide down a rope, rather than to have the rope pulled through them. Although Brooke No. 308,052 shows the movement of the rope through the device, it too, is no more pertinent than either Lauritsen or Sampson from the standpoint of construction, or operation.

37.

The exerciser of patent No. 3,197,204 is a completely new concept in the field of exerciser devices. The principle of frictional resistance of a rope around a shaft is very old and well known, and the use of this principle with fire-escape devices goes back at least to 1874, based upon the prior art listed by the defendants . . . some 85 years prior to the invention of the exerciser device of the patent in suit. Yet, no one made the transition to an exerciser from a friction-type fire-escape device nor from any other device employing the friction-resistance principle, even though persons in the exerciser art and in the physical education field are highly skilled, and the disadvantages of the existing exerciser devices were known to such persons in the exerciser and physical education fields.

38.

During the prosecution of the application which matured into patent No. 3,197,204, French patent No. 995,304 (Allain) showing a friction-type lowering device, was cited by the Examiner as a reference in a Patent Office action dated November 26, 1961. In a subsequent Patent Office action in the same case, dated October 28, 1963, the Examiner cited Sampson patent No. 500,778 and Lauritsen patent No. 609,106, both of which show friction-type twine tensioning devices.